

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/582,973A  
Source: IFWQ  
Date Processed by STIC: 12/5/06

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 12/05/2006

PATENT APPLICATION: US/10/582,973A

TIME: 09:48:41

Input Set : A:\Sequence Listing filed 2006-11-30.txt

Output Set: N:\CRF4\12052006\J582973A.raw

3 <110> APPLICANT: NAKAMURA, Toshikazu  
 4 MATSUMOTO, Kunio  
 5 FUKUTA, Kazuhiro  
 7 <120> TITLE OF INVENTION: GLYCOSYLATION-DEFICIENT HEPATOCYTE GROWTH FACTOR  
 9 <130> FILE REFERENCE: 2006\_0825A  
 11 <140> CURRENT APPLICATION NUMBER: 10/582,973A  
 C--> 12 <141> CURRENT FILING DATE: 2006-06-15  
 14 <150> PRIOR APPLICATION NUMBER: PCT/JP04/18719  
 15 <151> PRIOR FILING DATE: 2004-12-15  
 17 <150> PRIOR APPLICATION NUMBER: JP 2003-418790  
 18 <151> PRIOR FILING DATE: 2003-12-16  
 20 <150> PRIOR APPLICATION NUMBER: JP 2003-425691  
 21 <151> PRIOR FILING DATE: 2003-12-22  
 23 <160> NUMBER OF SEQ ID NOS: 8  
 25 <170> SOFTWARE: PatentIn version 3.3  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 728  
 29 <212> TYPE: PRT  
 30 <213> ORGANISM: Homo sapiens  
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 39 20 25 30  
 42 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr  
 43 35 40 45  
 46 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val  
 47 50 55 60  
 50 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu  
 51 65 70 75 80  
 54 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys  
 55 85 90 95  
 58 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe  
 59 100 105 110  
 62 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys  
 63 115 120 125  
 66 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys  
 67 130 135 140  
 70 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His  
 71 145 150 155 160  
 74 Ser Phe Leu Pro Ser Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr  
 75 165 170 175  
 78 Cys Arg Asn Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser

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79          180          185          190
82 Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu
83          195          200          205
86 Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp
87          210          215          220
90 His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro
91 225          230          235          240
94 His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp
95          245          250          255
98 Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr
99          260          265          270
102 Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys
103          275          280          285
106 Ala Asp Asn Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu
107          290          295          300
110 Cys Ile Gln Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile
111 305          310          315          320
114 Trp Asn Gly Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu
115          325          330          335
118 His Asp Met Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn
119          340          345          350
122 Tyr Cys Arg Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr
123          355          360          365
126 Asp Pro Asn Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp
127          370          375          380
130 Met Ser His Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met
131 385          390          395          400
134 Gly Asn Leu Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp
135          405          410          415
138 Lys Asn Met Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala
139          420          425          430
142 Ser Lys Leu Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His
143          435          440          445
146 Gly Pro Trp Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys
147          450          455          460
150 Pro Ile Ser Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu
151 465          470          475          480
154 Asp His Pro Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val
155          485          490          495
158 Asn Gly Ile Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg
159          500          505          510
162 Tyr Arg Asn Lys His Ile Cys Gly Ser Leu Ile Lys Glu Ser Trp
163          515          520          525
166 Val Leu Thr Ala Arg Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr
167          530          535          540
170 Glu Ala Trp Leu Gly Ile His Asp Val His Gly Arg Gly Asp Glu Lys
171 545          550          555          560
174 Cys Lys Gln Val Leu Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly
175          565          570          575

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178 Ser Asp Leu Val Leu Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp
179           580           585           590
182 Phe Val Ser Thr Ile Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu
183           595           600           605
186 Lys Thr Ser Cys Ser Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn
187           610           615           620
190 Tyr Asp Gly Leu Leu Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu
191 625           630           635           640
194 Lys Cys Ser Gln His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu
195           645           650           655
198 Ile Cys Ala Gly Ala Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp
199           660           665           670
202 Tyr Gly Gly Pro Leu Val Cys Glu Gln His Lys Met Arg Met Val Leu
203           675           680           685
206 Gly Val Ile Val Pro Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly
207           690           695           700
210 Ile Phe Val Arg Val Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile
211 705           710           715           720
214 Leu Thr Tyr Lys Val Pro Gln Ser
215           725
218 <210> SEQ ID NO: 2
219 <211> LENGTH: 723
220 <212> TYPE: PRT
221 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 2
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229 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
230           20           25           30
233 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
234           35           40           45
237 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
238           50           55           60
241 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
242 65           70           75           80
245 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
246           85           90           95
249 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
250           100          105          110
253 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
254           115          120          125
257 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
258           130          135          140
261 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
262 145          150          155          160
265 Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg
266           165          170          175
269 Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu Val Arg
270           180          185          190

```

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273 Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr
274      195      200      205
277 Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly
278      210      215      220
281 Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe
282 225      230      235      240
285 Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg
286      245      250      255
289 Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His
290      260      265      270
293 Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn Thr Met
294      275      280      285
297 Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln Gly Gln
298      290      295      300
301 Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly Ile Pro
302 305      310      315      320
305 Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met Thr Pro
306      325      330      335
309 Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg Asn Pro
310      340      345      350
313 Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn Ile Arg
314      355      360      365
317 Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His Gly Gln
318      370      375      380
321 Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu Ser Gln
322 385      390      395      400
325 Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met Glu Asp
326      405      410      415
329 Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu Asn Glu
330      420      425      430
333 Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp Cys Tyr
334      435      440      445
337 Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser Arg Cys
338      450      455      460
341 Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro Val Ile
342 465      470      475      480
345 Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile Pro Thr
346      485      490      495
349 Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn Lys His
350      500      505      510
353 Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr Ala Arg
354      515      520      525
357 Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp Leu Gly
358      530      535      540
361 Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln Val Leu
362 545      550      555      560
365 Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu Val Leu
366      565      570      575
369 Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser Thr Ile

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370          580          585          590
373 Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser Cys Ser
374          595          600          605
377 Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly Leu Leu
378          610          615          620
381 Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser Gln His
382 625          630          635          640
385 His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala Gly Ala
386          645          650          655
389 Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly Pro Leu
390          660          665          670
393 Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile Val Pro
394          675          680          685
397 Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val Arg Val
398          690          695          700
401 Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile Leu Thr Tyr Lys Val
402 705          710          715          720
405 Pro Gln Ser
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410 <211> LENGTH: 2172
411 <212> TYPE: DNA
412 <213> ORGANISM: Homo sapiens
414 <400> SEQUENCE: 3
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419 gaattcaaaa aatcagcaaa gactacccta atcaaaatag atccagcact gaagataaaa 180
421 accaaaaaag tgaatactgc agaccaatgt gctaatagat gtactaggaa taaaggactt 240
423 ccattcactt gcaaggcttt tgtttttgat aaagcaagaa aacaatgcct ctggttcccc 300
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427 aacaaagact acattagaaa ctgcatcatt ggtaaaggac gcagctacaa gggaacagta 420
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431 agctatcggg gtaaagacct acaggaaaac tactgtcgaa atcctcgagg ggaagaaggg 540
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435 tgttcagaag ttgaatgcat gacctgcaat ggggagagtt atcgaggtct catggatcat 660
437 acagaatcag gcaagatttg tcagcgctgg gatcatcaga caccacaccg gcacaaattc 720
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441 cagccgaggg catggtgcta tactcttgac cctcacaccc gctgggagta ctgtgcaatt 840
443 aaaacatgcg ctgacaatac tatgaatgac actgatgttc ctttggaaac aactgaatgc 900
445 atccaaggtc aaggagaagg ctacaggggc actgtcaata ccatttgga tggaattcca 960
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459 gatgtcatg gacctggtg ctacacggga aatccactca ttccttgga ttattgccct 1380
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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 12/05/2006  
PATENT APPLICATION:    US/10/582,973A      TIME: 09:48:42

Input Set : A:\Sequence Listing filed 2006-11-30.txt  
Output Set: N:\CRF4\12052006\J582973A.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:4,5,6,7,8

VERIFICATION SUMMARY

DATE: 12/05/2006

PATENT APPLICATION: US/10/582,973A

TIME: 09:48:42

Input Set : A:\Sequence Listing filed 2006-11-30.txt

Output Set: N:\CRF4\12052006\J582973A.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date